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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,046	03/02/2004	Mi Ae Choi	3449-0310P	9809

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EXAMINER	
MARANDI, JAMES R	

ART UNIT	PAPER NUMBER
2421	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/790,046	CHOI, MI AE	
	Examiner	Art Unit	
	JAMES R. MARANDI	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1) This action is in response to amendment filed on 5/14/2008. Claims 17-34 have been newly added. These claims were entered after consideration of applicant's letter of 10/1/2008. Claims 1-16 have been cancelled.

Response to Arguments

2) Applicant's arguments filed 5/14/2008 have been fully considered but they are not persuasive.

Examiner asserts that Applicant's Admitted Prior Art (AAPA), as reflected in instant application's ¶¶ [2] - [31], provides a concise view of the state of the art at the time of invention. Furthermore, a copy of ATSC A/92 (previously provided) shows the structure of Data Service Tables (DSTs) and their relation to file systems (pages 26, 32-33).To further demonstrate the state of the art, at the time of invention, Examiner has provided a copy of a tutorial by Newell & Crinon, entitled "The ATSC Data Broadcasting Specification", presented as part of course material at Stanford University, Winter of 2000 quarter , Course CS-448a (hereinafter "Newell").

- Applicant argues that "***there is no advertising image path in the DST of Hamilton. The images (perhaps advertisements) of Hamilton may be stored locally, or may be streamed, or other wise provided. But, however they are provided, there is nothing to suggest that the images are provided via an embedded image path of any sort, let along an image path embedded in a DST.***" (Page 13th of the Remarks, 2nd Paragraph)

Examiner disagrees.

Hamilton discloses that the signal to be displayed, in the event of a trigger such as changing of the channel (¶ [14]), comprises static images, dynamic applets, animation, and advertisements (¶¶ [16] - [19]).

Hamilton further discloses that the advertisements may be streamed (¶ [15]). Since Hamilton discloses streams such as MPEG-2 (See Fig. 4, ¶ [32]), where user data 444 is extracted/ separated from Audio 474, and video 472 (content the viewer has to wait for).

The mechanics of this extraction was notoriously well known, within the art, at the time of invention, as reflected in AAPA (¶¶ [2] - [31]). Furthermore, ATSC (pages 32-33, table 15.6) shows the syntax for the Service Data Table Byte

(SDT) Structure (also shown in applicant's disclosure, Fig. 2, with addition of description to "service_private_data_byte"). The "service_private_data_byte" is reserved for recovering/indicating Network addresses such as Network Resource Tables (NRTs, including network addresses, URLs, etc., also shown in Fig. 12.1). As demonstrated by Newell (pages 4 and 5, section on Service Description Framework, and Fig. 3), the MPEG-2 transport streams are monitored for PIDs, from which SDT, NRT, and PMTs are extracted, tapped ,and matched in order to separate programs, broadcast data (advertisements or other applications) and interactive data (advertisements, games, other applications). This clearly indicates awareness of local and remote file systems/server for extraction, storage, and further processing.

- Applicant further argues that "***Hamilton does not disclose or suggest cancelling an act of displaying the advertisement after the all data sections of the specific application are downloaded, extracted and ready for execution.***" (Page 13th of the Remarks, 2nd Paragraph)

Examiner disagrees. See Hamilton ¶ [14], where the signal (advertisement) is terminated as soon as the new program (channel) is available.

Claim Rejections - 35 USC § 103

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4) Claims 17-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over J.S. Hamilton. USPGPUB 2002/0087973 (hereinafter "Hamilton") in view of Newell et al., "The ATSC Data Broadcasting Specification", Stanford University course CS 448-a material for Winter 2000 (hereinafter "Newell").

Regarding claims 17, 23, and 29 Hamilton discloses **a method of operating a data broadcasting system, a data broadcasting system, and a client device in a data broadcasting system, that executes a data broadcast under a client-server environment** (a digital TV network using MPEG transport streams, as in Fig. 1A, with client STB and Server transmitting/ receiving information), **the method comprising the steps of:**

performing the following sequence of steps on the client device while the individual data sections are being downloaded and extracted

(Hamilton inserts a signal to entertain the viewer while extracting/ downloading the program the viewer is tuning to –channel was changed to- ¶[13]) ;

extracting advertising-image related data (advertising is extracted from the local drive, or streamed through MPEG transport stream ¶ [15].)**, the advertising-image related data** is extracted from a local drive, transport stream, or internet.

downloading an advertisement image from the local drive, transport stream, or internet**; and displaying the downloaded advertisement image** (¶ [15])**;**

cancelling the step of displaying the advertisement image after all data sections of the specific application are downloaded and extracted by the client device; ¶ [14], where the signal (advertisement) is terminated as soon as the new program (channel) is available **; and executing the specific application on the client device** (the tuned program is displayed or the desired application executed)**.**

Hamilton is not explicit in providing **"an advertisement image path**" for extracting the advertisement, and does not detail:

downloading at a client device a data service table (DST) relating to a specific application

extracting information relating to the specific application from the DST on the client device

downloading at the client device individual data sections of the specific application based upon the extracted information

extracting data from the downloaded individual data sections on the client device;

However, Newell, in analogous art, discloses:

downloading at a client device a data service table (DST) relating to a specific application (MPEG-2 transport is received at client device, e.g. STB. The SDT is extracted from PIDs of the transport stream)**;**

extracting information relating to the specific application from the DST on the client device (information from SDTs are extracted through Taps)**;**

downloading at the client device individual data sections of the specific application based upon the extracted information (client device matches tapIds and applications to extract appropriate data corresponding to appropriate application)**;**

extracting data from the downloaded individual data sections on the client device; (see pages 4-5, Service Description Framework section, and Fig. 3. Furthermore, the NRT specifies network connections and are designated in SDT, see dashed lines in Fig. 3, and as such specify the logical address/ **file**

system path of the files/objects fro locating the files, such as advertising image, or gaming applications, etc.).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the system of Hamilton, with Newell's teachings in order to provide flexibility for locating files/applications anywhere in the network while providing access to various local and remote applications.

Regarding claims 18, 24, and 30 **downloading multiple advertisement images, and composing a composite advertisement image from the multiple advertisement images**, in ¶¶ [16] , [18], and [19], Hamilton discloses creating, correlating, linking multiple ads together.

Regarding claims 19, 25, and 31 **displaying one of a still image and a moving image**, Hamilton's advertisement/signal comprises static images, dynamic applets, animation, and etc. (¶¶ [16] - [19])

Regarding claims 20, 26, and 32 **displaying the downloaded advertisement image over the video broadcast on a predetermined subset of the screen of the client device, displaying multiple inputs on a screen, e.g. PIP**, is a

notoriously well known feature of video display devices.

Regarding claims 21, 27, and 33 **displaying the downloaded advertisement image on a full portion of the screen of the client device**, Hamilton's advertisement/signal becomes the only input to the display device therefore it has full coverage of the screen.

Regarding claims 22, 28, and 34 **wherein the step of downloading at the client device a data service table (DST) is initiated by one of turning on power to the client device; and changing a channel at the client device**, changing channels causes delay in acquiring programming data from a new channel, this is the same as turning the TV on, as the TV begins to tune to/ acquire the channel it was set on before turn-off. Therefore both these triggers are the same.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. MARANDI whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2421

/James R. Marandi/
Examiner, Art Unit 2421